



Access Programs at the Regional and Local Level

-  Slides 8A. Innovative Tools and Techniques for Successfully Achieving Access Management through the MPO Process
Anne Benware, Capital District Transportation Committee
-  Slides 8B. How Access Management Works in the Planning Environment
Tom Kloster, Metro, Oregon/Gail Curtis, Oregon DOT
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Mark Radovic, Gannett Fleming, Inc.

Innovative Tools & Techniques for Successfully Achieving Access Management through the MPO Process

Prepared for 4th National Conference on Access
Management
by
Capital District Transportation Committee (CDTC)
Staff

Portland, Oregon
August 14, 2000

Background

- CDTC is the MPO for NY's Albany area (800,000 pop.)
- 4 cities, with major suburbs in-between
- Arterial system uses old "farm to market" roads
- Low to moderate density development along majority of corridors occurred incrementally

Challenges

- New York - a Home Rule state
- 79 distinct municipalities in the region often results in uncoordinated land use planning and development decisions
- Arterials carry increasing amounts of traffic & serve a variety of often conflicting functions



Toward Integrating Land Use & Transportation: Changing the dialogue from ...

"Every property has a right to as much access
as it wants!"

(...as long as their
driveways have
sufficient radii &
their LOS is good!)



... to an Increasingly More Common Approach ...

"NYSDOT includes arterial
management as an integral
component of its planning,
traffic safety and project
development activities and
works in partnership with
local governments ..."



How has CDTC facilitated and encouraged this change in focus?

- increased communication between communities, CDTC and NYSDOT
- enhancement of CDTC's technical credibility both with NYSDOT and communities
- support for communities in achieving community goals through land use/transportation planning process

MPO Structure and Responsibilities: A Formula for Success

- Broad committee membership & consensus requirement = collaborative, inclusive environment
- TIP funding based on objective, technically sound project selection process
- Traffic Modeling/Technical Credibility

Initiatives Toward Integration

- Expanded policy structure beyond traditional counties' and cities' to include suburban towns and villages
- LRP - shift from new highway planning to developing localized solutions to critical problems
- CMS plan recognizes role of arterial management in preserving capacity investments



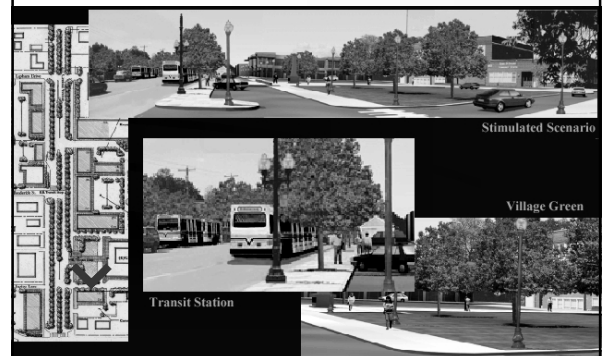
Cooperative Transportation Plans

- Contractual agreements to address local concerns and regional system planning
- 7 CTPs covering some of region's most congested corridors
- Elevated the discussion of arterial management



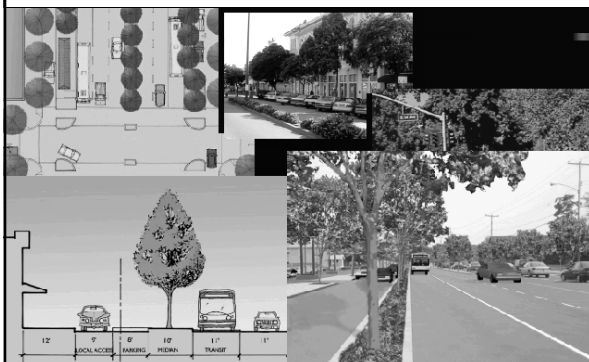
Resulting projects receive priority for federal funds

Access Management Plans Rte 5 Corridor Study



Suburban Strip

Colonie Village Center
Multi-way Boulevard



Design Committees

- Authorized by NYSDOT: members include NYSDOT, CDTC staff, design consultants, local community reps =
More inclusive design process resulting in "community compatible" designs while meeting NYSDOT traffic objectives



New Visions - Guiding Principles

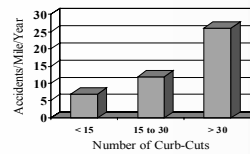
- Preserve & Manage
- Develop the Region's Potential
- Link Transportation & Land Use
- Plan & Build for All Modes



New Technical Tools

Arterial-Land Access Conflict

Accidents Increase with Number of Curb-cuts
(5,000 to 15,000 AADT)



Residential Use-Traffic Conflict

LOC = distance between commercial or residential driveways and AADT



Earmarked TIP Funds

New Visions long range budget reflected in 1997 TIP process

3 Steps:

- \$50 M setaside for previously under-represented categories
- \$30 M selected solely on project merit (using new performance measures)
- \$10 M reserved for projects id'd after public review of draft TIP

Linkage Planning Grants

Provides funding to local governments for new land use & transportation integration studies

Grants made to 12 projects ranging from corridor plans, a town center master plan to a truck access study



Utilizing Institutional Credibility built upon

- Good will
 - Technical ability
 - Leverage of federal transportation law
- Achieved modest, but growing success



Access Management in the Portland Metropolitan Area *Methods to Manage Access Based on Land Use*

Gail Curtis, AICP
Oregon Department of Transportation
Tom Kloster, AICP
Metro



Portland Region Access Management

Introduction



- Oregon has a long tradition of coordinated planning among governments
- Cornerstone of statewide planning program is providing certainty
- Access management policies viewed in the context of larger land use plans

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Portland Region Access Management

About Metro



- Elected regional government
- Manages growth, transportation, greenspaces and solid waste in Portland region
- Operates zoo, stadium, convention center, performing arts centers

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Portland Region Access Management

About ODOT



- Statewide agency that maintains Oregon Transportation Plan
- Builds and operates state highways
- Operates under Executive Branch
- Oversight by the Governor-appointed Oregon Transportation Commission



Portland Region Access Management

Developing 2040 Plan



- Developed in response to a transportation crisis
- Consensus-based process involves 24 cities, 3 counties and other agencies, including ODOT
- Major public outreach on issues of urban sprawl and congestion

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Portland Region Access Management

Implementing 2040



- Respond to expected growth with timely multi-modal improvements
- Ensure that street designs complement planned land uses
- Leverage development of centers and corridors

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Portland Region Access Management
Centers & Corridors



- Emphasize transit, pedestrian and bicycle travel in street designs
- Balance capacity needs on major streets with traffic calming to slow motor vehicles

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Portland Region Access Management
Industry & Intermodal Facilities



- Manage access to thoroughways to maintain acceptable levels of freight mobility
- Emphasize motor vehicle access on major streets serving industrial and intermodal areas

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Portland Region Access Management
Protect Rural Reserves



- Limit highway improvements outside UGB to green corridors
- Design rural roads to limit impacts on long-term viability of rural areas

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Portland Region Access Management
Why Focus on Street Design?

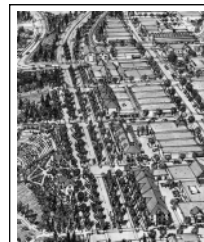


- Links land use and transportation
- Need to establish clear access management objectives
- Major streets are NIMBYs
- Growing cost and scale of streets
- Establishes modal expectations

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Regional Street Design Project
Creating a Classification System



- Use Street Design to implement 2040 Growth Concept
- Create a conduit for public involvement through design
- Use common terms to evoke design purpose



Regional Street Design Project
Creating a Classification System



- Build on best elements of local street designs
- Provide for local flexibility and creativity
- Define a process for implementation



Regional Street Design Project

Street Design Concepts



Throughways connect centers and major destinations and provide mobility across the region, and include freeway and highway design types.



Boulevards are transit, pedestrian, and bicycle-oriented designs that serve centers and main streets.



Streets balance all modes of travel in corridors and neighborhoods.



Roads are motor vehicle-oriented, and include urban roads that serve industrial areas and rural roads that serve urban and rural reserves.



Regional Street Design Project

Freeway Design



- ☐ Motor vehicle-oriented
- ☐ Limited access
- ☐ Separated grades
- ☐ Connect centers and industrial areas
- ☐ 62% of principal arterial system

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Regional Street Design Project

Highway Design



- ☐ Motor vehicle-oriented
- ☐ Limited access
- ☐ Mixed separate and at-grade intersections
- ☐ Connect centers and industry
- ☐ 38% of principal arterial system

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Regional Street Design Project

Urban Road Design



- ☐ Motor vehicle-oriented
- ☐ Key freight function
- ☐ Somewhat limited access
- ☐ Serves industrial and intermodal areas
- ☐ 9% of arterial system

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Regional Street Design Project

Boulevard Design



- ☐ Transit, pedestrian, and bike oriented
- ☐ Many pedestrian crossings
- ☐ Many intersections
- ☐ Located in centers and main streets
- ☐ 17% of arterial system

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Regional Street Design Project

Street Design




- ☐ Balances all modes
- ☐ Some to many intersections
- ☐ Access managed to protect motor vehicle mobility
- ☐ Serves urban corridors and neighborhoods
- ☐ 53% of arterial system

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Regional Street Design Project

Rural Road Design







- ☐ Motor vehicle-oriented
- ☐ Striped bike/ped shoulder
- ☐ Agricultural access
- ☐ Serves rural areas
- ☐ 21% of arterial system

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1999 Oregon Highway Plan Designations

Metro's Street Design Policies and the Oregon Highway Plan

Metro's Throughways correspond to **Interstate and Statewide Highways** in the Oregon Highway Plan, and do not have a special land use designation

Metro's Boulevards correspond to the **Special Transportation Areas** in the Oregon Highway Plan

Metro's Streets correspond to the **Commercial Centers** designation in the Oregon Highway Plan

Metro's Urban Roads correspond to the **Urban Business Area** designation in the Oregon Highway Plan.



1999 Oregon Highway Plan Designations

Special Transportation Areas & the Oregon Highway Plan



- ☐ Areas of compact, mixed-use development identified in State and local plans
- ☐ Located on regional facilities that connect to statewide routes
- ☐ Emphasis on street connections to state facilities




1999 Oregon Highway Plan Designations

Commercial Centers & the Oregon Highway Plan




- ☐ Areas of clustered commercial development identified in State and local plans
- ☐ Located at where regional and statewide routes connect
- ☐ Emphasis on joint access to state highways




1999 Oregon Highway Plan Designations

Urban Business Areas & the Oregon Highway Plan



- ☐ Businesses and buildings clustered along state-owned regional routes
- ☐ Access managed through IGAs, MOUs and local plans
- ☐ Emphasis on shared driveways and inter-parcel circulation



Regional Street Design Project

Step 1: Classification Matrix

| Motor Vehicle Function and Land Use | Central City | Regional Center | Town Center | Station Community | Corridor | Main Street | Employment Center | Industrial Area | Inner Neighborhood | Outer Neighborhood | Green Corridor |
|-------------------------------------|--------------|-----------------|-------------|-------------------|----------|-------------|-------------------|-----------------|--------------------|--------------------|----------------|
| Freeway Through-route | F | F | F | F | F | F | F | F | F | F | F |
| Arterial Through-route | H | H | H | H | H | H | H | H | H | H | H |
| Major Arterial | B | B | B | B | S | B/S | R | R | S | S | R |
| Minor Arterial | B | B | B | B | S | B/S | R | R | S | S | R |



Regional Street Design Project

Step 2: Creating the Map



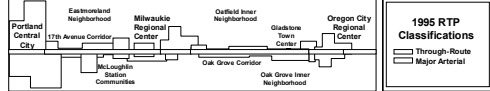
- GIS based mapping
- Reflect local design needs
- Build from land use plans



Regional Street Design Project

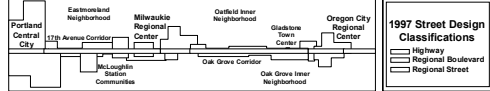
Creating a Street Design Map

Motor Vehicle Classification



1995 RTP
Classifications
Through-Route
Major Arterial

Street Design Classification

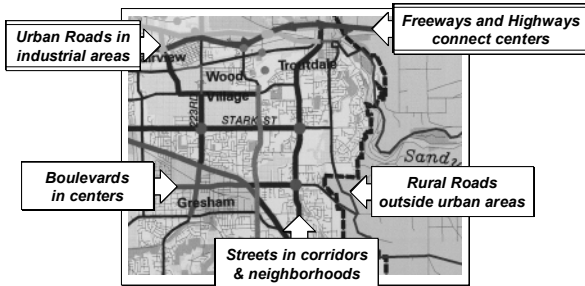


1997 Street Design
Classifications
Highway
Regional Boulevard
Regional Street



Regional Street Design Project

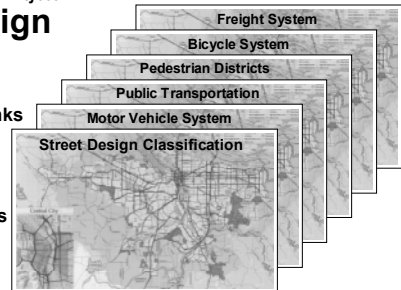
Regional Street Design Map



Regional Street Design Project

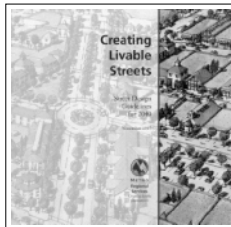
Street Design and the RTP System Maps

- Street design links land use and transportation
- Street design map coordinates other modal systems



Portland Region Access Management

Making it Happen



- UGMFP - Cities and Counties must incorporate policies into local plans
- 2,000 copies of Creating Livable Streets distributed to local officials and citizens



Portland Region Access Management

...making it happen

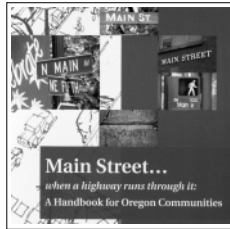


- Handbook serves as a threshold for regional funding
- Boulevards become funding category, with \$10 million allocated to nine boulevard "retrofit" projects from TEA-21 funds



Portland Region Access Management

Making it Happen



- 1999 Oregon Highway Plan emphasis on land use and transportation connection
- 6,000 copies of *Main Street... When a Highway Runs Through It* distributed to local officials and citizens



Portland Region Access Management

Conclusion



- Access management should be based on land use plans
- Main tools in the Portland area are the 2040 Growth Concept and Oregon Highway Plan
- Metro street design maps and OHP developed to reflect land use plans

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Federal Way's Implementation of State Access Management Standards

4th National Access Management Conference
Portland, Oregon
August 14, 2000

Richard A. Perez, P.E.
City Traffic Engineer
City of Federal Way, Washington

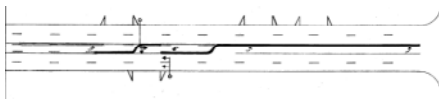


Background

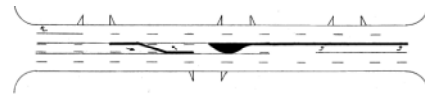
- Previous experience in implementing access management standards in a smaller city
- Extensive use of C-curb



Retrofit #1 The Half-Signal Proposal



Retrofit #2 Part Time Left Turn Out



Issues Considered

- WSDOT Standards
- Access Classifications
- Access Spacing Standards
- Signal Spacing Standards
- Accesses per Parcel
- Timing of Implementation

WSDOT Standards

- Requires cities over 22,500 to adopt similar standards
- Most suburban arterials are Class 4
- 250 ft access spacing
- 0.5 mi signal spacing
- 1 access per parcel
- No median treatment

City's Goals

- Avoid problems of the past
- Minimize variances
- Consistent standards citywide
- Realistic for urban conditions
- Politically acceptable

Access Classifications

- ☐ Functional classification
- ☐ Volume
- ☐ Collision experience
- ☐ Planned cross-section

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Access Classifications

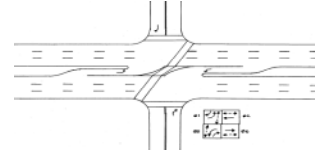
- ☒ Functional classification
- ☒ Volume
- ☒ Collision experience
- ☒ Planned cross-section

Access Spacing

- Basis: NCHRP 348 and TRC 456
- No deceleration length assumed
- Low right-turn collision experience
- Hierarchy of movements
- No left-turns across 95th percentile queues

Signal Spacing

- Generally inherited 0.25 mi
- Some as short as 600 ft
- Adopted minimum bandwidth standard
- “No net loss” bandwidth policy
- City Center considerations



Accesses per Parcel

- Super-blocks
- Unsignalized access

Timing of Implementation

- Street improvement projects
- Land use applications

Don't Get Discouraged!

- Urban arterials need not look like expressways
- Pick your battles
- Consider the relative safety of different movements
- Easier to get improvements in development review than in capital projects

Corridor Capacity Preservation Program

Delaware's Program To Protect Existing Transportation Corridors

Delaware's Corridor Capacity Preservation Program

Program Establishment

1996

Delaware Code, Title 17, Section 145

- Reduce the need for the replacement of the transportation system
- Focus development toward existing municipal growth areas
- Advance the quality of life of Delawareans and the development policies adopted by the Cabinet Committee on State Planning Issues

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Delaware's Corridor Capacity Preservation Program

DelDOT Acquisition Authority & Process

- Title 17 Delaware Code
 - Chapter 145: Grants authority to acquire land in fee simple or lessor interests for those long range plans requiring corridor capacity preservation, up to and including condemnation.
- Title 29 Delaware Code
 - Chapter 9505: Describes the procedure which DelDOT must adhere to when acquiring private property or property rights.

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Delaware's Corridor Capacity Preservation Program

Title 29, Chapter 9505

- Complete an appraisal that establishes *just compensation . . . not less than the approved appraised fair market value.*
 - Just compensation, as in all real estate appraisals, is based on *Highest & Best Use . . . the use of land, which will bring the greatest economic return over a given time.*
- * Under the Corridor Capacity Preservation Program, DelDOT will purchase development rights and/or access rights from property, if the highest and best use is for a traffic generator greater than the current use.
- Provide owner with copy of approved appraisal.

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Delaware's Corridor Capacity Preservation Program

Title 29, Chapter 9505 (Cont.)

- If, after a reasonable period of time, negotiations do not result in mutual agreement, DelDOT must initiate eminent domain action.
- *Order of Possession* hearing is first scheduled by the Superior Court (usually within 6-8 weeks of DelDOT filing); at which time DelDOT must prove the public necessity for the purchase and deposit the just compensation offer.
- Upon grant of legal order of possession to DelDOT, the owner can petition court to withdraw deposit.
- *Compensation* hearing is scheduled by the Superior Court after possession is granted (usually 1-2 years).

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Delaware's Corridor Capacity Preservation Program

Corridors Included in the Program

- SR 1
45 Miles
Dover Air Force Base to Nassau Bypass
- Route 48 (Lancaster Pike)
2 Miles
Hercules Road to Route 41
- U.S. 13
46 Miles
DE 10 to Maryland State Line
- U.S. 113
33 Miles
Milford to Maryland State Line




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Delaware's Corridor Capacity Preservation Program

Policy Development Timeline

- 1992 ■ Department established pilot Corridor Capacity Preservation Program to proactively maintain capacity on SR 1
- 1996 ■ General Assembly formally established Corridor Capacity Preservation Program
- 1997 ■ US 13, US 113, Rt 48 (Lancaster Pike) & SR 1 Corridors were formally adopted into the Program
 - Began public, state and local government involvement processes on US 13 Corridor
- 1999-2000 ■ Continued on-going concept development on SR 1 Corridor
 - Began developing local concepts with Towns and Counties on US 13 Corridor



Delaware's Corridor Capacity Preservation Program

Goals of the Program


Maintain an existing road's ability to handle traffic safely and efficiently

Coordinate the transportation impacts of increased economic growth.

Preserve the ability to make future transportation-related improvements

Minimize the need to build an entirely new road on new alignment

Sort local and through traffic



Delaware's Corridor Capacity Preservation Program


Why is the Program Needed?

Applications for Access

- In the last 3 years there have been over 100 applications for new access onto US 13 Corridor.
- Just over half (53%) are outside of the Towns and their developing areas.
- Without the Program there would be significant increases in driveways and conflict points along the US 13 Corridor.

Pressure For New Signals

- There are 22 existing signals within the 46 miles of US 13 Corridor.
- Within the last two years 7 additional signals have been warranted, a roughly 30% increase in signals.



Delaware's Corridor Capacity Preservation Program

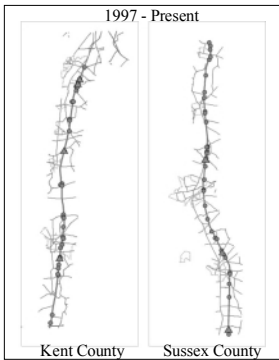
Development and Signal Pressures on US 13

- Applications for New Access
- △ Pressure for New Signals (7)


Since 1997

- 100 + applications for new access onto US 13
- (7) additional signals would represent a 33% increase to the existing 22 signals currently on this 46 mile section of US 13

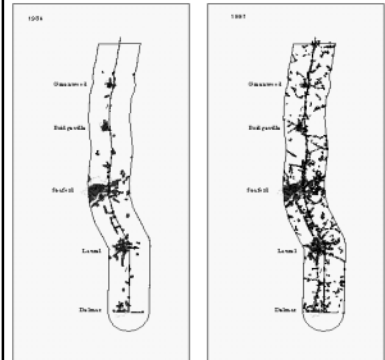
1997 - Present



Kent County Sussex County




Delaware's Corridor Capacity Preservation Program



Sussex County Development From 1984 - 1997

Sussex County is expected to grow 26.7 % in the next 20 yrs.

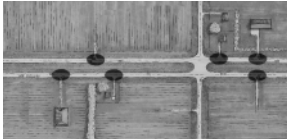
Source: The News Journal




Delaware's Corridor Capacity Preservation Program


Development Proposal: One property owner seeking to subdivide land for residential uses with direct access.

Direct Access



Corridor Capacity Preservation







Delaware's Corridor Capacity Preservation Program

Direct Access

Corridor Capacity Preservation





Delaware's Corridor Capacity Preservation Program

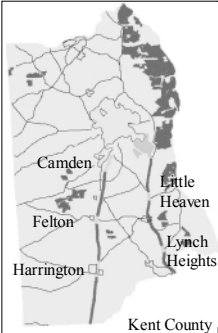
Original Program

"A" and "B" Area Designations on U.S. 13


- "A" Areas - No significant transportation investments. Low density lands where direct access to corridor is not permitted.
- "B" Areas - Lands in and around towns and settled areas, where development exists or is planned to occur.
- Focus transportation investments to "B" Areas
- "B" Areas in Towns on the Corridor: Camden, Felton, Harrington

Designations U.S. 13 - Kent County

- "B" Area 20%
- "A" Area 80%




Kent County



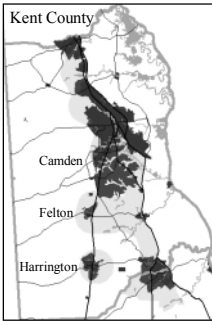
Delaware's Corridor Capacity Preservation Program

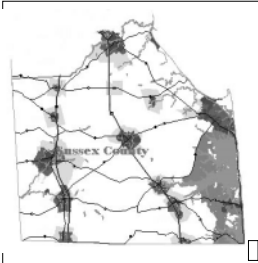
Recent Program Revisions

- Governor's Cabinet Committee on State Planning Issues adopts the *Strategies for State Policies and Spending* in December 1999
- Corridor Preservation Program addresses State-wide development designations, as well as County Secondary Developing Areas
- Revisions create a tiered approach to investments still focusing on towns and existing infrastructure




Delaware's Corridor Capacity Preservation Program





State Investment Areas

- ☐ Community Areas
- ☐ Developing Areas
- ☐ Secondary (County Growth) Areas
- ☐ Rural Areas



Delaware's Corridor Capacity Preservation Program

Access Application Process

Community & Developing Area
Develop Local Access Plans (Working Group)

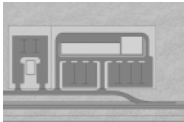
- Service Roads
- Cross - Access Easements
- Temporary Entrances

Department Will Concentrate Investment In These Areas

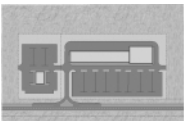
Secondary Developing Areas
Some Development Allowed Base on Traffic Generation

- Low Traffic Generating Uses
- Combined Entrances
- Developer Funded Service Roads


Rural Areas
No New Direct Access Allowed
Department Will Compensate For Denial of Access.



Example Service Road Access



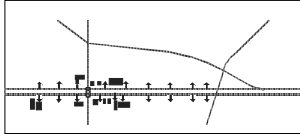
Example Combined Entrance



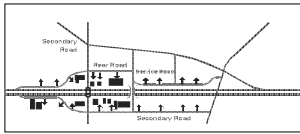
Delaware's Corridor Capacity Preservation Program

Transportation Planning In and Around the Municipalities

Example Skeletal Transportation Plan




Existing Secondary Road Network



Secondary Road Network Improved with Local Roads and Connections

- \$5 Million/year (over next 6 years) budgeted for real estate & planning for Corridor Capacity Preservation Program.
- Local Plan under development in coordination with Seaford Working Group
- Plan establishes location of future road network and access points - new development can be designed around the plan



Delaware's Corridor Capacity Preservation Program



Delaware's Corridor Capacity Preservation Program



Delaware's Corridor Capacity Preservation Program

Benefits of the Program

- Focusing Infrastructure and Accommodating Economic Growth In and Around the Towns & Within the Designated County Growth Areas
- Maintaining Viability of Regional Traffic, a Function of the Economic Viability of Growth Along the Corridor
- Improving Safety on the Corridor by Reducing Conflict Points and Sorting Local and Regional Traffic
- Promotes Controlled and Sustainable Growth of the Corridor While Providing Infrastructure to Support Economic Development



Delaware's Corridor Capacity Preservation Program

Summary

- Program Has Been Revised to Address State and County Designated Investment Areas
- Program Accommodates Development and Targets Investment Toward Municipalities
- Corridor Plans in Communities and Developing Areas are Being Developed Through Town Working Groups and County Coordination
- Corridor Access Plans are Reviewed for Economic Viability



Delaware's Corridor Capacity Preservation Program



Corridor Capacity Preservation Program

Delaware's Program To Protect Existing Transportation Corridors